

## ***Chemical Spill Safety Precautions and Response Actions***

### **Course Description:**

This course provides detailed aspects regarding the handling of hazardous chemicals and the emergency planning of chemical spills and in particular hazardous chemical spills. Using a mixture of formal presentations and group exercises, the course will enable the delegate to become familiar with the properties of hazardous chemicals and how both to control them safely and to obtain the information needed to provide a safe system of work. The problems associated with accidental chemical releases and the actions to be taken are covered and to provide a complete picture, the problems associated with waste disposal. Procedures for the assessment of the risks during the storage and handling and use are covered so that formal Risk Assessments can be carried out on existing installations and prior to the introduction of a new chemical. This will enable the delegate to define the precautions, which should be taken. Finally the delegate will be given guidance on the development of procedures to ensure safe operating practices and the chemical spill contingency planning and follow up.

### **Course Objectives:**

**By the end of the course the delegates will be fully efficient in:**

- **Chemical spills contingency plan**
- **Chemicals safety precautions and actions**
- **GHS and applications**
- **NFPA code**
- **Transportation of hazardous substances**
- **Handling and assessment of risk prior to working with hazardous substances Procedures of dealing with spills and contamination of persons and property**

# EXPERT

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- Appreciate the needs for emergency response plans
- The production of a hazardous substance Procedure Manual
- The safe disposal of hazardous waste and by products
- Personal Protective Equipment for working with hazardous substances
- Purchasing Controls for ordering hazardous materials
- Storage facilities and security considerations

## Training Methodology:

- Discussion, workshops, brainstorming
- Video projection, Exercises, Presentations

## Course Outline

### Day 1

- Introduction to course, its aims and objectives
- The role of the supervisor and manager in preventing chemical incidents
- Types of hazardous substances, understanding of key properties and principles of classification
- How international regulations (OSHA – DOT – EPA) identify hazardous substances.
- NFPA code regarding chemical accidents.

### Day 2

- The global harmonized system for classification and labeling of chemicals (GHS).
- Risk assessment of chemicals.
- Hazard identification of chemicals (Physical – Health- Environmental – Biological – Chemical) Hazards.
- The Pass ways of chemicals into the human body.
- Hygiene role for avoiding chemical hazards.
- Hazardous data sheets, information required to complete or interpret hazard data sheets

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- Packaging hazardous substances for carriage
- Transportation of hazardous substances, key international regulations
- The role of the purchasing department in ensuring safe handling

## Day 3

### Transportation of hazardous chemical substances and the associated risks

- Documentation needs
- Safety equipment
- Operational controls/limits
- Storage of hazardous substances and specifications
- Firefighting and safety regulations of chemicals store
- Bulk storage
- Packaged goods storage
- Chemical warehouses, design and operational features

## Day 4

- PPE assessments selection and use
- Risk assessment as applied to transport and storage of hazardous substances
- Safe handling, control and measurement of exposure to hazardous substances
- Chemical spillage containment, emergency response and decontamination/remediation
- Hazardous Waste Management HWM and waste hierarchy
- The problems associated with the disposal of chemical waste
- Special requirements relating to hazardous work
- Hazardous work documentation
- Key procedures, a suggested approach to the development of procedures
- Training needs assessment for the distribution and storage process

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## Day 5

- Previous chemical process safety accidents worldwide
- Chemical spill accidents and its impact (Real case studies)
- Summary and wrap up for the course contents
- Workshops and discussions
- Exam

Location	Conrad Hotel
Start Date	08 Sep 2024
End Date	12 Sep 2024
Fees Before Discount	3500 \$
Special Discount	15% (To Nominate Three Participants)
Fees After Discount	2975 \$